

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

|  |   |   |
|--|---|---|
| Applicant's or agent's file reference<br><b>P00037583-P0</b>   | <b>FOR FURTHER ACTION</b>   | See item 4 below  |
| International application No.<br><b>PCT/JP2005/001375</b>  | International filing date ( <i>day/month/year</i> )<br><b>01 February 2005 (01.02.2005)</b> | Priority date ( <i>day/month/year</i> )<br><b>18 February 2004 (18.02.2004)</b> |
| International Patent Classification (8th edition unless older edition indicated)<br>See relevant information in Form PCT/ISA/237 |   |   |
| Applicant<br><b>MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.</b>   |   |   |

|                                     |   |   |           |                     |                          |            |          |                          |             |  |                          |            |                            |                                     |           |   |                          |            |                         |                          |             |  |                                     |              |   |
|-------------------------------------|---|---|-----------|---------------------|--------------------------|------------|----------|--------------------------|-------------|--|--------------------------|------------|----------------------------|-------------------------------------|-----------|---|--------------------------|------------|-------------------------|--------------------------|-------------|--|-------------------------------------|--------------|---|
| 1.                                  | This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 <i>bis</i> .1(a).   |   |           |                     |                          |            |          |                          |             |  |                          |            |                            |                                     |           |   |                          |            |                         |                          |             |  |                                     |              |   |
| 2.                                  | This REPORT consists of a total of 5 sheets, including this cover sheet.<br><br>In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.   |   |           |                     |                          |            |          |                          |             |  |                          |            |                            |                                     |           |   |                          |            |                         |                          |             |  |                                     |              |   |
| 3.                                  | <p>This report contains indications relating to the following items:</p> <table style="width: 100%;"> <tr> <td style="width: 10%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 30%;">Box No. I</td> <td style="width: 80%;">Basis of the report</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table> | <input checked="" type="checkbox"/>   | Box No. I | Basis of the report | <input type="checkbox"/> | Box No. II | Priority | <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability | <input type="checkbox"/> | Box No. IV | Lack of unity of invention | <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement | <input type="checkbox"/> | Box No. VI | Certain documents cited | <input type="checkbox"/> | Box No. VII | Certain defects in the international application | <input checked="" type="checkbox"/> | Box No. VIII | Certain observations on the international application |
| <input checked="" type="checkbox"/> | Box No. I   | Basis of the report   |           |                     |                          |            |          |                          |             |  |                          |            |                            |                                     |           |   |                          |            |                         |                          |             |  |                                     |              |   |
| <input type="checkbox"/>            | Box No. II  | Priority  |           |                     |                          |            |          |                          |             |  |                          |            |                            |                                     |           |   |                          |            |                         |                          |             |  |                                     |              |   |
| <input type="checkbox"/>            | Box No. III   | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |           |                     |                          |            |          |                          |             |  |                          |            |                            |                                     |           |   |                          |            |                         |                          |             |  |                                     |              |   |
| <input type="checkbox"/>            | Box No. IV  | Lack of unity of invention  |           |                     |                          |            |          |                          |             |  |                          |            |                            |                                     |           |   |                          |            |                         |                          |             |  |                                     |              |   |
| <input checked="" type="checkbox"/> | Box No. V   | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |           |                     |                          |            |          |                          |             |  |                          |            |                            |                                     |           |   |                          |            |                         |                          |             |  |                                     |              |   |
| <input type="checkbox"/>            | Box No. VI  | Certain documents cited   |           |                     |                          |            |          |                          |             |  |                          |            |                            |                                     |           |   |                          |            |                         |                          |             |  |                                     |              |   |
| <input type="checkbox"/>            | Box No. VII   | Certain defects in the international application  |           |                     |                          |            |          |                          |             |  |                          |            |                            |                                     |           |   |                          |            |                         |                          |             |  |                                     |              |   |
| <input checked="" type="checkbox"/> | Box No. VIII  | Certain observations on the international application   |           |                     |                          |            |          |                          |             |  |                          |            |                            |                                     |           |   |                          |            |                         |                          |             |  |                                     |              |   |
| 4.                                  | The International Bureau will communicate this report to designated Offices in accordance with Rules 44 <i>bis</i> .3(c) and 93 <i>bis</i> .1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44 <i>bis</i> .2).  |   |           |                     |                          |            |          |                          |             |  |                          |            |                            |                                     |           |   |                          |            |                         |                          |             |  |                                     |              |   |

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|---|---|--|---|
| The International Bureau of WIPO<br>34, chemin des Colombettes<br>1211 Geneva 20, Switzerland<br><br>Facsimile No. +41 22 338 82 70 | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">Date of issuance of this report<br/><b>19 September 2006 (19.09.2006)</b></td> </tr> <tr> <td style="padding: 5px;">Authorized officer<br/><br/><b>Masashi Honda</b><br/><br/>e-mail: pt08@wipo.int</td> </tr> </table> | Date of issuance of this report<br><b>19 September 2006 (19.09.2006)</b> | Authorized officer<br><br><b>Masashi Honda</b><br><br>e-mail: pt08@wipo.int |
| Date of issuance of this report<br><b>19 September 2006 (19.09.2006)</b>  |   |  |   |
| Authorized officer<br><br><b>Masashi Honda</b><br><br>e-mail: pt08@wipo.int   |   |  |   |

# PATENT COOPERATION TREATY

TRANSLATION

From the  
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing  
(day/month/year)

Applicant's or agent's file reference

**P00037583-P0**

**FOR FURTHER ACTION**

See paragraph 2 below

International application No.

**PCT/JP2005/001375**

International filing date (day/month/year)

**01.02.2005**

Priority date (day/month/year)

**18.02.2004**

International Patent Classification (IPC) or both national classification and IPC

Applicant

**MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.**

1. This opinion contains indications relating to the following items:

- |                                     |              |  |
|-------------------------------------|--------------|--|
| <input checked="" type="checkbox"/> | Box No. I    | Basis of the opinion   |
| <input type="checkbox"/>            | Box No. II   | Priority   |
| <input type="checkbox"/>            | Box No. III  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability   |
| <input type="checkbox"/>            | Box No. IV   | Lack of unity of invention   |
| <input checked="" type="checkbox"/> | Box No. V    | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/>            | Box No. VI   | Certain documents cited  |
| <input type="checkbox"/>            | Box No. VII  | Certain defects in the international application   |
| <input checked="" type="checkbox"/> | Box No. VIII | Certain observations on the international application  |

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP

Authorized officer

Facsimile No.

Telephone No.

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/001375

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐

This opinion has been established on the basis of a translation from the original language into the following language

\_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

☐

a sequence listing

☐

table(s) related to the sequence listing

b. format of material

☐

in written format

☐

in computer readable form

c. time of filing/furnishing

☐

contained in the international application as filed.

☐

filed together with the international application in computer readable form.

☐

furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/JP2005/001375

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

|                               |                    |     |
|-------------------------------|--------------------|-----|
| Novelty (N)                   | Claims <u>1-39</u> | YES |
|                               | Claims _____       | NO  |
| Inventive step (IS)           | Claims _____       | YES |
|                               | Claims <u>1-39</u> | NO  |
| Industrial applicability (IA) | Claims <u>1-39</u> | YES |
|                               | Claims _____       | NO  |

**2. Citations and explanations:**

Document 1: JP 62-202699 A (Mitsubishi Electric Corp.), 07 September 1987, full text, all drawings  
 Document 2: JP 58-92195 A (Onkyo Corp.), 01 June 1983, full text, all drawings  
 Document 3: JP 58-165500 A (Onkyo Corp.), 30 September 1983, full text, all drawings  
 Document 4: JP 6-345944 A (Hokuetsu Paper Mills, Ltd.), 20 December 1994, full text, all drawings  
 Document 5: JP 58-107798 A (Matsushita Electric Industrial Co., Ltd.), 27 June 1983, full text, all drawings  
 Document 6: JP 10-195305 A (Dainippon Printing Co., Ltd.), 28 June 1998, full text, all drawings

Comparing the inventions of claims 1-39 of the present application and the inventions disclosed in cited document 1, the inventions disclosed in claims 1-39 of the present application differ on the points that

- (1) The filling resin materials are polyolefin resins and polypropylene
  - (2) The blended materials contain a reinforcing agent
  - (3) It is manufactured by wet blending pulp and water, dehydrating and crushing, pelletized, blended with resin and injection molded
  - (4) A dust cap, not just a diaphragm, is included
  - (5) The fiber material is crushed to a fiber length of approximately 0.2mm
- but the inventions of claims 1-39 of the present application are identical to the inventions disclosed in cited document 1 on points other than these.

However,

- (1) An article in which the filling resin materials are polyolefin resins and polypropylene is disclosed in cited document 2.
- (2) An article in which blended materials contain a reinforcing agent made from an inorganic material such as silica is disclosed in cited document 3.
- (3) An article manufactured by wet blending pulp and water, dehydrating and crushing, pelletized, blended with resin and injection molded is disclosed in cited document 4.
- (4) A speaker formed from an injection molding also used as a dust cap is disclosed in cited document 4. Crushing a fiber material to a fiber length of approximately 1mm or less is disclosed in cited document 6.
- (5) Therefore, the inventions of claims 1-39 of the present application could be invented by combining the inventions of cited documents 2-6 with the inventions of cited document 1.

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/001375

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Claims 33 onwards state “wet blending fibrous resin and a filler”, but it is unclear what type of articles the “fibrous resin and a filler” are. In addition, it is unclear what type of operation wet blending these articles is.

As a result of considering the disclosures in the specification, it is found that the disclosures of claim 33 onwards differ from the disclosures in the specification. Therefore, in order for the International Searching Authority to examine the novelty and inventive steps, it is found that “wet blending fibrous resin and a filler” is “wet blending a fibrous material such as wood fiber and water”.

In addition, as disclosed in Par. No. 0070 onwards of the specification, it is found that the “granulated resin” produced by crushing a polyolefin resin is used as a raw material.

Therefore, the manufacturing process for the diaphragm and dust cap disclosed in claim 33 onwards is found to be such that “they are manufactured by wet blending a pulp such as wood fiber and water, dehydrating and crushing, pelletized, blended with a granulated resin and injection molded”, as in the disclosures of those parts in the specification.